

Consumer Price Index (CPI) Explanatory Note

Consumer Price Index

The Consumer Price Index (CPI) is a measure of the average change in prices over time in a fixed market basket of goods and services. The Bureau of Labor Statistics publishes CPI's for two population groups: (1) a CPI for All Urban Consumers (CPI-U) which covers approximately 80 percent of the total population and (2), a CPI for Urban Wage Earners and Clerical Workers (CPI-W) which covers 32 percent of the total population. The CPI-U includes, in addition to wage earners and clerical workers, groups such as professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, and retirees and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, and fuels, transportation fares, charges for doctors' and dentists' services, drugs, and the other goods that people buy for day-to-day living. Prices are collected in 85 urban areas across the country from about 57,000 housing units and approximately 19,000 retail establishments – department stores, supermarkets, hospitals, gasoline stations and other types of stores and services establishments. All taxes directly associated with the purchase and use of items are included in the index. Prices of food, fuel, and a few other items are obtained every month in all 85 locations. Prices of most other commodities and services are collected every month in the five largest geographic areas and every other month in other areas. Prices of most goods and services are obtained by either personal visits or telephone calls from the Bureau's trained representatives. Some data, such as used car prices, are obtained from secondary sources.

In calculating the index, price changes for the various items in each location are averaged together with weights which represent their importance in the spending of the appropriate population group. Local data are then combined to obtain a U.S. city average. Separate indexes are also published by size of city, by region of country, for cross-classifications of regions and population-size classes, and for 29 local areas. Area indexes do not measure differences in the level of prices among cities, they only measure the average change in prices for each area since the base period.

The indexes measure price change from a designated reference date, 1982-84, which equals 100.0. An increase of 7 percent, for example, is shown as 107.0. This change can also be expressed in dollars as follows: The price of a base period "market basket" of goods and services in the CPI has risen from \$100 in 1982-84 to \$107.

For further details see *BLS Handbook of Methods*, BLS Bulletin 2414, September 1992 and the *Consumer Price Index: 1987 Revision*, BLS Report 736, January 1987.

Calculating Index Changes

Movements of the indexes from one month to another are usually expressed as percent changes rather than changes in index points, because index point changes are affected by the level of the index in relation to its base period while percent changes are not. The example in the accompanying box illustrates the computation of index point and percent changes.

Percent changes for 3-month and 6-month periods are expressed as annual rates and are computed according to the standard formula for compound growth rates. These data indicate what the percent change would be if the current rate were maintained for a 12-month period.

<i>Index Point Change</i>	
CPI	112.5
Less previous index	108.5
Equals index point change	4.0
<i>Percent Change</i>	
Index point difference	4.0
Divided by the previous index	108.5
Equals	0.037
Results multiplied by one hundred	0.037 x 100
Equals percent change	3.7